congenital pyloric stenosis in infants. In a general way I am inclined to take the stand which Dr. Tait has taken. The question of the future health of the child operated upon and the action of the pyloric stenosis and the artificial opening after operation, seem to me very important and worthy of consideration. The reports of the future health of these cases will certainly be very interesting and instructive. In a number of cases of gastroenterostomy done upon adults, an autopsy some time after, has shown the pyloric stenosis cured and the artificial openings closed. In other cases, it has shown both the pyloric stenosis and the artificial opening closed. This condition of affairs is certainly very grave and should receive serious attention in coming to the decision of operating. Of course if there is an absolute obstruction of an organic nature, to the passage of material from the stomach to the intestines, there is only one thing to do in order to give the patient the slightest chance of relief, that is relieving the obstruction by making the junction of viscera in the way that seems best, or by removing the obstruction by leaving the pyloric stenosis as it is and opening a new channel from the stomach to the intestines. I do not mean this as a criticism upon the cases that have here been referred to to-night, as I believe these cases were carefully diagnosed and well treated. I merely want to raise the question of the future action, of the difficulties in such cases and in regard to the surgical procedure in all cases, as I fear that some enthusiasts may be led to surgical means as a relief before it is clearly established that a good result cannot be obtained by medical means.

THE FAUCIAL TONSILS CONSIDERED FROM A MEDICAL AND SURGICAL STANDPOINT.

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The mere mention of the subject of this paper will bring to our minds thoughts, and probably experiences, we have had concerning these masses of lymphoid tissue.

Treat the subject as lightly as you will, nevertheless the prominent position of the faucial tonsils at the orifice of the respiratory and alimentary tracts, their exposed position to foreign substances, their close relation to the cervical lymphatics and their great vascularity gives them an importance not easily ignored. One remarkable feature is that these organs so ready of access and so easily observed have remained a kind of medical enigma.

What passes in the mind of the average observer when examining the tonsils? He notes if they are red, swollen and for the presence of exudate. If this trio are absent his investigation, as a rule, ceases and so the tonsils have remained for many years comparatively unmolested except for the tonsillotome (which is capable of removing a piece of the tonsil) and a long list of gargles and swabs.

Gradually the importance of a more serious consideration of the faucial tonsils has forced itself upon us. Aside from their local effect, their relation to certain systemic conditions has proven so intimate that in many instances our previous lethargy has changed to alarm.

Considering the faucial tonsils as a pathological entity they may be regarded from two points of view. First, diseases characteristic of themselves with their local effect and second as a portal of infection whereby the general economy may suffer from some apparently remote disorder.

By a gradual pathological chain the acute forms of tonsillitis can be merged into the chronic and so, various types of tonsillitis can, for clinical purposes, be described as a continuation of the same inflammatory disease. An acute superficial or catarrhal inflammation may readily subside or it may extend to the more severe form of lacuna tonsillitis, more commonly known as follicular, where the infection extends into the tonsillar crypts which accumulate a debris of epithelial cells, leukocytes and bacteria. These crypts form a favorable spot for the encouragement of bacterial growth and the tonsil reacts against it by inflammatory reaction. Let this condition carry us to the next type, i. e., parenchymatous inflammation where the stroma of the tonsil becomes involved; this may assume an acute condition where pus is formed from an infection of the surroundig tissue, as in peritonsillar abscess or quinsy. A more chronic course may be followed which resolves itself into organized inflammatory exudate in the form of scar tissue and an hypertrophy of the connective tissue. The acute lacuna tonsillitis just mentioned may assume, like unto itself, a chronic form the so-called caseous tonsillitis which consists of masses of inspissated secretion and bacteria mixed with food.

What the agent is that prompts these various changes and decides whether an acute superficial inflammation will subside as such or go on to graver forms can only be determined by knowing the nature of the infection which originally involved it in disease or attacked it later.

During the acute and chronic forms of tonsillitis many investigators have demonstrated the presence of pathogenic micro-organisms such as streptococcus, staphylococcus (aureous and albus) and diplococcus. In lesser frequency are found the pneumococcus, Kloebs-Laeffler bacillus, staphylococcus citreous, micrococcus tetragynous, micrococcus albus liquefaciens, bacillus tuberculosis, leptothrix and other forms.

Whether an acute attack can leave a permanent stigma upon the tonsil or whether it requires a long series of acute infections to accomplish the same end is merely a matter of degree; suffice it to say that the ill effect of the presence in the throat of an obstruction that can so impair functions and development, is a matter of serious consequence.

The effect of enlarged faucial tonsils upon articulation and deglutition is most marked. They can change the development of the mouth and nares such as faulty dental alignment, narrow palate arch and drooping lower maxilla. Note the dull and listless manner with stupid expression and thick lips. The local effect upon the mucous membrane of the entire respiratory tract from constantly breathing through the mouth causes a hacky cough and tendency to chronic bronchial affections. Their influence upon taste, hearing and smell is marked. Disturbed sleep with efforts at breathing has an influence upon the development of the chest and we see in these cases the so-called pigeon-breast.

Many reflex symptoms might also be mentioned, due to local irritation from the enlarged tonsils.

It is not my intention to enter minutely into the histology and pathology of the faucial tonsils, yet a few words regarding lymphatic tissue will show how we may class them and what relation they hold to the general economy. A true lymphatic gland consists of a capsule of connective tissue which sends fibrous prolongations inward dividing the gland into various divisions. The center of the gland is composed of a loose and rectiform tissue through which flows lymph. The functions of these glands seem to be to neutralize certain toxins and destroy bacteria; they act as cleansers or scavengers. If the glands become overtaxed by the continued presense of a toxin, an excessively virulent bacteria, or by a lessened vitality they become, instead of a protection, a veritable focus of disease distributing their poisons directly to the lymph circulation.

In describing a lymph gland I have in a word embodied the construction and function of the tonsil for like a lymphatic gland it consists of a stroma of connective tissue containing blood and lymph vessels and in its depth germinating centers where are found cells undergoing mitotic division, the lymphocytes. The faucial tonsil only differs from a lymphatic gland proper in its epithelial covering which dips into it in the form of crypts; its exposed position and relation to external influences.

As all lymph glands are part of and in the direct course of the lymphatic circulation, and as the tonsil is an integral part of this system, is it not interesting to follow some of the experiments that have been attempted to determine the powers these glands possess in their resistance to toxins and bacteria and if overcome by such their resulting influence upon the general system? The difference in relation of the tonsils and lymph glands to the lymph channels is that in the tonsil they have their origin while they merely pass through the lymph glands.

The usual course of an infection, if succeeding in passing the various barriers, would likely be through the tonsil into the deep cervical chain of glands beneath the sterno-cleido-mastoid muscle thence to the thoracic glands and finally the thoracic duct. It thus distributes an infection directly into the circulation, producing such conditions as general sepsis, rheumatic arthritis, endocarditis, nephritis, leukemia, general tuberculosis, pleurisy, etc.

Four cases are here appended demonstrating the close relation between a tonsilitis and various organic lesions. They were taken from the records of Dr. R. Langley Porter and Dr. Philip King Brown.

Case No. 1: A child, female, aged 9. Endocarditis, double mitral lesions. The child comes complaining of shortness of breath, some dizziness and an occasional fainting spell. She is very pale but moderately nourished, well grown and apparently anemic. On examination she has chronically enlarged tonsils with a chronic pharyngitis. Anterior and posterior cervical glands moderately enlarged. Chest shows slight rickety deformity. The heart is enlarged especially to the right. There are very marked presystolic and systolic bruits. The child is unquestionably suffering from a mitral stenosis with regurgitation, but the heart is well compensated. In this case there is no history of any rheumatism or other infective disease, and the morbid condition can with assurance be assigned to the repeated attacks of tonsillitis of which there is a definite history.

Case No. 2: A female child, aged 11 months. Pseudo-leukemia infantum. The child has an adenoid and enlarged tonsils which show crypts filled with secretion, picture of acute tonsillitis. Up to the time of the onset the child was a perfectly healthy baby, had been properly fed and the attack of tonsillitis lasted about six days. After this the child began to go rapidly down hill and was very pale. An examination shows but 50% by the Dare instrument. The blood picture showed 12,000 leucocytes of which 80% were lymphocytes. There were many nucleated red cells, marked deformity of the red cells and a number of megalocytes. The spleen was enlarged and tender. The condition maintained itself for about two months and finally disappeared under careful feeding and iron therapy. There was no question that the toxemia which led up to the blood condition was directly due to the infection of tonsillitis.

Case No. 3: A. S., male, aged 14. Hematuria, rash, temperature. Seen in consultation with the history of having an attack of acute tonsillitis three days previously, and followed next day by enlargement of the anterior and posterior cervical glands. The posterior cervical glands were markedly enlarged and tender so that the head was retracted and carried in a position to suggest meningitis. On the fifth day of the disease a marked hematuria with a very definite diminution of urine was manifest. A question arose as to whether we were not dealing with a case of scarlet fever. It was decided that we were not because there had been no discernible rash, and there was no strawberry tongue or circumoral pallor; also the onset was not abrupt and the pulse rate never was unduly rapid. This decision seemed to be warranted when during the course of the disease no desquamation became apparent. This case may be looked upon as one of infection through the tonsils and naso pharynx.

Case No. 4: R. A., Dec. 12th, 1902. Age 6½ years. Endocarditis, tuberculosis, fever. History chronic constipation from birth. Bleeding with movements. Several attacks of protracted vomiting over a period of two years necessitating rectal feeding. Has had frequent bronchitis, also skin disturbance causing itching. Status: High color, coated tongue, Land systolic murmur all over heart. Liver tender over lower border, also in upper epigastrum. April, 1903: Loud systolic murmur, daily temperature per rectum 100-101°, pulse irregular. July, 1903: Removed portion of tonsil by tonsillotome, followed by fever each day over a long period of time. August, 1905: Tonsils very inflamed and complains of headache and fever each day, also palpitation of heart. Considerable prostration every afternoon. August 15th, 1907: Tonsils smaller and less troublesome. Mitral regurgitation plainly heard. Jan. 13th, 1908: Following several attacks of tonsillitis developed a swelling in right wrist, Dr. Levison by X-ray, etc., makes a diagnosis of tuberculosis of a tendon. Feb. 5th, 1908: Dr. Deane removed tonsils by radical method which were found to be small, adhesive and deeply imbedded. Feb. 5th, 1909: One year later. Wrist symptoms entirely abated, slight systolic murmur. Child has never been in such good physical condition. Has gained markedly in weight and strength.

As to the tonsil having a direct connection with the respiratory tract, an infection can start by taking the same course but from the thoracic glands it can pass through the hilus of the lung to the visceral pulmonary lymphatics and by that means infect the apices of the lung, which, on account of

being away from the direct respiratory current and with less motion they form a peculiarly favorable position to harbor a tubercular infection. Dr. J. Grober made a series of experiments upon the lower animals illustrating this point, three of which I may be permitted to quote.

First experiment, September 16. A young rabbit was anesthetized by ether and chloroformed, and 1 c.c. of sterilized emulsion of black Chinese paint injected into the left tonsil.

September 23rd, 1902, the autopsy showed black particles in the blood. Behind the left tonsil there was a mass composed of the coloring matter and leucocytes. The lymph glands on left side of the neck, as far as the upper border of the thyroid cartilage, were stained black. The microscope demonstrated the lymph vessels filled with free coloring matter, as well as leucocytes which enclosed small particles of pigment.

The glands and lymph vessels were fairly packed with the coloring matter. Beyond the zone of the lymph glands and vessels little coloring matter was found.

Second experiment: A small dog was narcotized by morphin injections. Six and one-half c.c. of the sterilized emulsion of black pigment was injected into the tonsil.

The autopsy, after complete exsanguination, showed the following conditions: Very little coloring matter in the leucocytes, none being free in the blood. The tonsil and the loose connective tissue containing the afferent lymphatic vessels of the tonsil were of a deep black color.

Along the muscles of the neck, as far as the hyoid bone and to the median line, there were streaks of pigment. The pigmented area also spread downward below the hyoid bone, where it extended 1 cm. beyond the median line. The coloring matter was traced to the bony opening of the thorax and to the parietal pleura, which, when stripped off and examined by transmitted light, showed the black pigmentation. The lymph vessels of the paratracheal connective tissue and of the esophagus, as far as 2 or 3 cm. above the bifurcation of the trachea, were also colored, whereas on the left or uninjected side no such phenomenon was found. All the lymph glands on the lateral wall of the pharynx, hyoid bone, larynx, along the deep vessels of the neck and supraclavicular fossa on the right side were black. The parietal pleura at the apex showed an exudate, but no adhesion to the visceral pleura.

The miscroscope showed that in all the above-mentioned positions there were no other changes present. In the glands the coloring matter occupied the paravascular spaces. In the lymph vessels between the supraclavicular glands and the parietal pleura of the apex there was a large number of leucocytes filled with coloring matter. Free coloring matter was also present in this region. In the apex of the lung there were no signs of an inflammatory reaction. The coloring matter here seemed to be freely deposited within the connective tissue. In the above-mentioned exudate at the apex there was coloring matter in the leucocytes.

Third experiment: April 4. A small dog was placed under morphin narcosis and 5 c.c. of coloring matter injected into the tonsil. April 13th, the same experiment was performed on the opposite side.

May 10th, the autopsy, after exsanguination, showed a large amount of coloring matter free in the blood; the leucocytes, the tonsil and connective tissue, and the connective tissue of the neck on both sides along the larynx to the aperture of the thorax were colored symmetrically. The lymphatic glands along the large bloodvessels, as well as those in the supraclavicular region, were deeply stained. The coloring matter was also found within the lymphatic vessels and in the paravascular spaces. A fibrous exudate was found in the apices of both lungs, thus forming a bridge of inflammatory material from the parietal to the visceral pleura. The coloring matter was also present in the exudate. The microscopic appearance of the apices presented a light grayish coloration. The glands in the mediastinum were stained on the left side, as were also the bronchial glands. In the left lung there were three other small fibrinous exudates in which the coloring matter was present.

From these experiments Grober builds the hypothesis that "tuberculous infection of the apex of the lung may take place via the deep lymphatic chain, the supraclavicular glands, and thence to the parietal lymphatic vessels, where an inflammatory exudate is thrown across to the visceral pleura. The tubercle bacilli travel across this inflammatory bridge and enter the apex of the lung."

I may state that these experiments have only to do with foreign particles of inorganic matter. What inhibitory effect this lymphatic tract would have upon the passage of bacteria is problematical but likely far more marked.

From the experiments of Kayser, Goodale, Hendelsohn, Grober and others, the following conclusions have been drawn:

1. Minute particles of foreign matter such as dust, carmine and other pigments when locally applied are rapidly absorbed by the tonsils from their crypts and are found in sections of the tonsil removed as early as fifteen minutes after.

2. Bacteria do not pass so readily and are hard to discover in the tissue of the tonsil.

3. Ordinary organisms are probably absorbed less rapidly on account of the resistance of the mucous membrane, and if they enter the parenchyma they are promptly destroyed unless able to resist the phagocytic powers in the tonsil and even in the latter case their virulence is likely altered.

4. Virulent organisms can follow the same course as dust particles and may cause local lesions, lymphatic involvement and an infection of any part of the body.

5. Tubercle bacilli may lodge and remain indefinitely in the crypts of the tonsil ready to be absorbed at any time, though not necessarily involving the tonsil in actual disease.

A topic which concerns us mostly is the nature of enlarged cervical glands and the mode of their infection. We have been in the habit of calling such glands scrofulous or lymphatic, though through extensive investigation Schlenker and Kreuskmann, as described in Virchow's Archives, have shown that a large per cent of these glands are due to a tubercular process, the infection either proceeding in a retrograde manner from a tubercular focus in the lung or more likely from the tonsil. Following up these cases the tonsil was examined in certain instances; tubercle bacilli were found in the follicles where they had penetrated the epithelium, in others tubercles and giant cells were found in the subepithelial layer.

Case No. 5: Case of a child seen in the clinic for tonsillectomy. Tonsillar tuberculosis. The

tonsils were very much enlarged and the child had an adenoid. These were removed and the child was sent in for examination as to its general condition. The lungs and heart were perfectly normal, and the child was normal in every way. No sign of tuberculosis or any other organic disease, although the tonsils macerated with sand and, injected into guinea pigs showed, by characteristic tubercular infections, that these tonsils harbored tubercular foci.

Acute tonsillar tuberculosis hardly concerns us here, as it is found as a part of military tuberculosis or as a metastatic process in the last stage of pulmonary tuberculosis, it produces great destruction in the form of ulcers with yellow miliary nodules. In strong contrast to the acute form is the chronic which usually exists without marked symptoms. This infection might come about in two ways, either secondarily by contamination with the sputum, where the bacilli lodging upon the tonsil are forced into the crypts or primarily by inspired air, the tonsil being rendered more susceptible by having lost its epithelium through inflammation.

Orth, in Virchow's Archives, and Baumgarten have shown that the tubercle bacilli in food is a frequent cause. In their experiments they fed animals with tubercular tissue and demonstrated later tuberculosis of the cervical and bronchial glands.

A chronic tuberculous tonsil may remain as a local condition or as already described it may infect the cervical glands and pass directly to the main lymph channels, causing a general miliary tuberculosis or more likely to the pleura and a bronchial gland which could break down and empty its contents into a bronchus. The latter I believe to be more common than we imagine judging from the frequency of such an occurrence in the cervical chain.

I have devoted rather more space to the tonsil in its relation to tuberculosis than I had intended, but allow me a word more to explain my position. I am not attempting to show that the tonsil is the main channel of tuberculous infection, but it is one important means of contagion that is proven beyond a doubt.

As the tonsil is a portal which may convey tuberculous infection to the lymphatic circulation so it can transport by the same channel other infections. Rheumatic symptoms in the joints and muscles so frequently follow attacks of tonsillitis that it is useless to review or quote from the extensive literature upon the subject. Any of us, in our limited private practice, can state instances of the relations of the two and so strongly has it been impressed upon us that the salicylates, as a remedy for tonsillitis, have with many become almost a routine practice, whether it is apparently indicated or not.

Fletch Ingals states that 45% of acute tonsillitis has a rheumatic history. There is not as yet evidence to prove that the tonsil is the chief portal for entrance of the rheumatic poison; considering, however, that in all probobility acute articular rheumatism represents a mild type of septic hematogenic infection of the joints there is no reason why the tonsils with their notorious faculty for infection with pyogenic germs should not possibly, even frequently, assume the role of an infected wound leading to septic consequences of a systemic nature. The septic conditions vary in degree and location and rheumatism is one of the phenomena.

After considering the tonsils from a pathologic standpoint we are naturally led up to the therapeutic. Whether the condition is acute or chronic, whether the tonsil is acting as a mechanical obstruction in the throat or a portal whereby the system is the subject of general infection, must be considered.

The natural aversion of the laity to surgical interference leads us first to the application of local remedies or to drugs that may neutralize the toxins already in the blood. Little has been accomplished by this means. The exposed portions of the tonsilse continually bathed in secretion and in active motion are poor surfaces to retain for more than a moment any application. The general cleansing of this area by peroxid of hydrogen or an alkalin wash seems about all that can be accomplished by a gargle. The local application by a swab to the surface of the tonsil of tincture of iron, iodin, guiacol, the silver salts, etc., may possibly have some merit, though not marked. The deep crypts, though quite inaccessible, can be washed out by a small syringe with any antiseptic, such as pyoktanin, carbolic acid, formalin, peroxid, etc. The use of the actual cautery or various cauterizing reagents, with the idea of destroying part of the tonsil, are to be discouraged, for, where it is deemed that such treatment is necessary, the more radical procedure of removal is far more effective.

The question as to what are the indications for removal of a tonsil is a subject that can easily lead to discussion and many differences of opinion.

Since the advent of the so-called radical operation, where the tonsil is dissected from its attachments and removed entirely within its capsule, we have within our means a much more effective and wider range of action.

The much used tonsillotome can hardly be of service except to remove a large projecting mass, most of the tonsillar tissue being left behind. It certainly has its advantages in removing an obstruction, but there its usefulness ends. Many tonsils have been removed thus, with a satisfactory outcome, but they have all belonged to a simple hyperplastic type where the tonsil acted only as an impediment. Against a long list of tonsil troubles the tonsillotome and local applications have remained helpless.

Allow me to recite a clinical picture that we have likely all seen. A child ranging from ten to fifteen years of age, sallow complexion, poorly nourished and equally poor appetite, listless, subject to sore throats and colds and a hacky cough. We feel distinctly a chain of lymphatic glands in the neck running from the tonsil downward. In the throat are two small lobulated and boggy tonsils barely projecting beyond the pillars and adhesive to them in places. They look red and congested, as also the surrounding tissue. As to the possible systemic condition associated with this case we might mention a long list of which I have

already spoken earlier in this paper. We are satisfied that these tonsils have lost their vital resistance, and aside from their local effect are acting as a portal for some kind of infection. It is in such a case as this, with many similar varieties, that the complete extirpation of the tonsil is indicated.

The operation may be performed either during the administration of a general anesthesia, as in small children, or by local anesthesia, which is practicable in many larger children and adults.

By the first method the patient is placed in a prone position and ether vapor administered by a rubber tube passed through the nose into the pharynx. The assistant stands on one side and manipulates the mouth gag, tongue depressor and sponges. The surgeon stands on the other side, and, after drawing the tonsil outward with a tenaculum, dissects it from its attachments; i. e., plica supra tonsillaris above, the plica triangularis below and the anterior and posterior pillars, finishing by cutting or snaring it from its attachment to the superior constrictor muscle of the pharynx, through which pass its bloodvessels and lymphatic connections. By avoiding the vessels of the anterior and posterior pillars no serious bleeding need be anticipated.

Immediately after removing the tonsil from its base there is a sharp hemorrhage which is readily checked by pressure.

The removal of the tonsil by local anesthesia is altogether a more pleasing procedure. A solution of cocain carbolic acid is applied locally and cocain with adrenalin is injected into the deeper structures. The patient is in a sitting position and can frequently assist by holding his tongue down. The operation is quite bloodless on account of the deep injections of cocain and adrenalin and absolutely painless.

The post-operative treatment of these cases is a subject which I believe must be given careful attention. We have opened up numerous lymphatic channels in their exit from the tonsil, and until granulations have formed over them they can act as a ready means of absorption, producing many of the various forms of sepsis that were originally feared might emanate from the tonsil. Some time ago Dr. Leo Meininger was called to treat two cases which I had, several days previous, operated upon by the radical method. They impressed me deeply and I felt that rather than blame the operation of complete extirpation that the poison had entered through some fautly technic of surgical asepsis. Dr. Meininger has kindly supplied me with the following histories of the two cases:

Case No. 1: R. C., age 12 years old. Entered my service July 31st, 1908, complaining of pain and swelling of both wrist joints, ankle, on right side. She also complained of pain over the precordial region, all of which she had since July 29th, 1908. Denies having had measles, scarlet-fever, diphtheria and rheumatism. Has had chickenpox and also states that she has had quite a number of colds, sore throats, etc. She further stated that on July 25th she was operated upon by Dr. Deane for radical removal of the tonsil and that two days after operation commenced to have pain and swelling in wrist joints and then in ankle joints. Mother called in physician who found her "very sick" with considerable temperature and great pain. On examination found the above-mentioned joints painful and somewhat swollen and on examination of cardiac region found a systolic murmur at the apex transmitted to the left and an accentuated second pulmonic sound, the beats being irregular and rapid. Child had temperature of 104.2° per rectum and pulse 148. At the end of four weeks joint symptoms had entirely disappeared and defect in heart sounds hardly perceptible.

Case No. 2: E. A., age 9 years. Was called to see child Oct. 27th, 1908, with the following history: Was operated upon by Dr. Deane for removal of tonsils, complete operation on Oct. 22nd, 1908. On the evening of Oct. 26th mother noticed a rash on body and the child was suffering from a general malaise, loss of appetite and some temperature. On examination found on the inner side of both thighs and on the face an erythematous rash which itched considerably. Temperature by mouth of 101.6° and pulse 100. The child had been on a selected diet since operation of milk, eggs and gruels and had only been out of bed 24 hours before I saw her. The child was sick for about one week when the symptoms disappeared.

From a long series of cases that it has been my privilege to operate upon these two have been the only ones that have been followed by systemic infection. They constitute less than two per cent of the total number of operations in my experience; none the less they act as a warning and have tended to make me more thoughtful in the post operative treatment.

Previous to the operation the mouth, teeth and pharynx, also the nose and nasopharynx are cleansed by means of an alkalin antiseptic solution, use of the tooth brush and the throat swabbed with peroxid of hydrogen.

Following the romoval of the tonsil after all bleeding has been checked, the fossa tonsillaris is painted with a five to ten per cent solution of nitrate of silver. This not only acts as a caustic and antiseptic but also as a styptic. After the patient has sufficiently recovered from the anesthetic the mouth should be again and repeatedly cleansed with the alkalin solution, alternating with peroxid.

Perfect quiet in bed should be insisted upon, for aside from lessening the chances of a secondary hemorrhage it prevents the patient from exposing himself to infection and renders less likely the absorption of any septic material by the lymphatics. Only food that has been sterilized by cooking should be permitted, drinking water boiled. The usual practice of swallowing cracked ice or ice-cream, purchased in the neighborhood, should be prohibited.

A detailed consideration of the cases I have operated upon by the radical method in the last three years I will reserve for a future paper. My present opinion is that the operation is based upon sound surgical principles and the only remedy for many a diseased tonsil with general systemic involvement.